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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1. (Cancelled)

1 2. (Currently amended) ~~The invention as defined in claim 1 further comprising the~~
2 ~~step of:~~

3 A method for use in a cable modem assigned to employ a primary downstream
4 channel, the method comprising the steps of:

5 storing an indication of an alternative downstream channel;

6 detecting that said primary downstream channel has become invalid;

7 switching to employ said alternative downstream channel in lieu of said primary
8 downstream channel whereby reinitialization of said cable modem is not required;

9 receiving via said alternative downstream channel an upstream channel descriptor;
10 and

11 switching to use for upstream communication a frequency and modulation scheme
12 indicated by said upstream channel descriptor.

1 3. (Currently amended) The invention as defined in claim 1 2 further comprising
2 the step of:

3 storing, prior to said detecting step, an upstream channel identifier;

4 ~~receiving, via said alternative downstream channel, an upstream channel~~
5 ~~descriptor; and~~

6 ~~switching to use for upstream communication a frequency and modulation scheme~~
7 ~~indicated as a function of said upstream channel descriptor and said upstream channel~~
8 ~~identifier~~

9 wherein said frequency and modulation scheme that is switched to in said
10 switching step is further a function of said upstream channel identifier.

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1 4. (Currently amended) ~~The invention as defined in claim 1~~
2 A method for use in a cable modem assigned to employ a primary downstream
3 channel, the method comprising the steps of:
4 storing an indication of an alternative downstream channel;
5 detecting that said primary downstream channel has become invalid; and
6 switching to employ said alternative downstream channel in lieu of said primary
7 downstream channel whereby reinitialization of said cable modem is not required;
8 wherein said cable modem had a particular Internet Protocol (IP) address, a
9 transmit power level, and a configuration file when communicating via said primary
10 downstream channel and wherein said cable modem uses said particular Internet Protocol
11 (IP) address, said transmit power level, and said configuration file when initially
12 communicating via said alternative downstream channel.

1 5. (Currently amended) ~~The invention as defined in claim 1 further comprising~~
2 ~~the steps of:~~
3 A method for use in a cable modem assigned to employ a primary downstream
4 channel, the method comprising the steps of:
5 storing an indication of an alternative downstream channel;
6 detecting that said primary downstream channel has become invalid; and
7 switching to employ said alternative downstream channel in lieu of said primary
8 downstream channel whereby reinitialization of said cable modem is not required;
9 ranging and registering with a cable modem terminating system (CMTS)
10 supplying said alternative downstream channel prior to performing said detecting and
11 switching steps.

1 6. (Currently amended) The invention as defined in claim 4 further comprising
2 the steps of:
3 storing at least one parameter established during initialization of said primary
4 downstream channel with a first cable modem terminating system (CMTS); and
5 transmitting said parameter by said cable modem to a second CMTS on said
6 alternative downstream channel.

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1 7. (Original) The invention as defined in claim 6 wherein said at least one
2 parameter is transmitted by said cable modem to said second CMTS prior to detecting in
3 said detecting step that said primary downstream channel has become invalid.

1 8. (Currently amended) The invention as defined in claim 6 wherein said at least
2 one parameter is transmitted by said cable modem to said second CMTS after detecting
3 in said detecting step that said primary downstream channel has become invalid.

9. (Cancelled)

1 10. (Currently amended) ~~The invention as defined in claim 9 wherein said cable~~
2 ~~modem further comprises:~~

3 A cable modem assigned to employ a primary downstream channel, comprising:
4 a memory for storing an indication of an alternative downstream channel;
5 a tunable receiver;
6 a processor for detecting that said primary downstream channel has become
7 invalid and instructing said tuner to tune to said alternative downstream channel in lieu of
8 said primary downstream channel whereby reinitialization of said cable modem is not
9 required; and

10 a tunable transmitter;

11 wherein said memory further stores an upstream channel descriptor and said
12 processor instructs said transmitter to use for upstream communication a frequency and
13 modulation scheme indicated by said upstream channel descriptor after detection that said
14 primary downstream channel has become invalid.

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1 11. (Currently amended) A cable modem assigned to employ a primary
2 downstream channel, comprising:
3 means for storing an indication of an alternative downstream channel;
4 means for detecting that said primary downstream channel has become invalid;
5 and
6 means for switching to employ said alternative downstream channel in lieu of said
7 primary downstream channel whereby reinitialization of said cable modem is not
8 required; and
9 means for receiving via said alternative downstream channel an upstream channel
10 descriptor; and
11 means for switching to use for upstream communication a frequency and
12 modulation scheme indicated by said upstream channel descriptor.

12. (Cancelled)

1 13. (Original) The invention as defined in claim 11 further comprising:
2 means for storing, prior to said detecting step, an upstream channel identifier;
3 ~~means for receiving, via said alternative downstream channel, an upstream~~
4 ~~channel descriptor; and~~
5 ~~means for switching to use for upstream communication a frequency and~~
6 ~~modulation scheme indicated as a function of said upstream channel descriptor and said~~
7 ~~upstream channel identifier~~
8 wherein said frequency and modulation scheme is further a function of said
9 upstream channel identifier.

1 14. (Original) The invention as defined in claim 11 wherein said cable modem had
2 a particular Internet Protocol (IP) address, a transmit power level, and a configuration file
3 when communicating via said primary downstream channel and wherein said cable
4 modem uses said particular Internet Protocol (IP) address, said transmit power level, and
5 said configuration file when initially communicating via said alternative downstream
6 channel.

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1 15. (Original) The invention as defined in claim 11 further comprising:
2 means for ranging and registering with a cable modem terminating system
3 (CMTS) supplying said alternative downstream channel prior to detection by said means
4 for detecting that said primary downstream channel has become invalid.

1 16. (Original) The invention as defined in claim 11 further comprising:
2 means for storing at least one parameter established during initialization of said
3 primary downstream channel with a first cable modem terminating system (CMTS); and
4 means for transmitting said parameter by said cable modem to a second CMTS on
5 said alternative downstream channel.

1 17. (Original) The invention as defined in claim 16 wherein said at least one
2 parameter is transmitted by said cable modem to said second CMTS prior to detecting by
3 said detecting means that said primary downstream channel has become invalid.

1 18. (Currently amended) The invention as defined in claim 16 wherein said at
2 least one parameter is transmitted by said cable modem to said second CMTS after ~~to~~
3 detecting by said detecting means that said primary downstream channel has become
4 invalid.

19. (Cancelled)

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1 20. (Currently amended) ~~The invention as defined in claim 19 wherein said cable~~
2 ~~modem further comprises:~~
3 A cable modem, comprising:
4 a first memory location storing an indication of a first channel to be used by said
5 cable modem as its primary downstream channel;
6 a second memory location storing an indication of a second channel to be used by
7 said cable modem as its alternative downstream channel; and
8 a third memory location storing at least one parameter determined during an
9 initialization process of said cable modem in conjunction with a cable modem
10 terminating system (CMTS) supplying said alternative downstream channel, said
11 initialization process being performed prior to said primary downstream channel
12 becoming invalid.

21. (Cancelled)

1 22. (Currently amended) The invention as defined in claim 24 20 wherein said
2 cable modem further comprises:
3 a transmitter for transmitting said at least one parameter to a second CMTS
4 supplying said alternative downstream channel.

1 23. (Currently amended) The invention as defined in claim ~~19~~ 20 wherein said
2 cable modem further comprises:
3 a detector that determines that said primary downstream channel is invalid; and
4 a frequency adjustable receiver tuner that changes from said first channel to said
5 second channel when said detector determines that said primary downstream channel is
6 invalid.

1 24. (Currently amended) The invention as defined in claim 23 wherein said cable
2 modem further comprises:
3 a frequency adjustable transmitter tuner that tunes to a new upstream channel in
4 response to a received upstream channel message.

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1 25. (Currently amended) The invention as defined in claim 23 24 wherein ~~said~~
2 ~~cable modem further comprises:~~
3 ~~a third memory location storing an upstream channel identifier received via said~~
4 ~~primary downstream channel; and~~
5 ~~said~~ a frequency adjustable transmitter tuner ~~that~~ tunes to a said new upstream
6 channel in response to a said received upstream channel message as a function of said
7 stored upstream channel identifier.

26. (Canceled)

1 27. (Currently amended) A first cable modem terminating system (CMTS),
2 comprising:
3 means for receiving as an input at least one parameter for cable modem service
4 provided between a cable modem and a second CMTS which is initially serving said
5 cable modem, said at least one parameter being established during initialization of said
6 cable modem service between said cable modem and said second CMTS; and
7 means for establishing cable modem service between said first CMTS and said
8 cable modem using said at least one parameter;
9 wherein said at least one parameter is supplied prior to a downstream channel
10 between said second CMTS and said cable modem becoming invalid.

1 28. (Original) The invention as defined in claim 27 wherein said at least one
2 parameter is one from the group consisting of: a configuration file, a security association,
3 DOCSIS version, concatenation support, payload header suppression, and multicasting
4 support.

1 29. (Original) The invention as defined in claim 27 wherein said at least one
2 parameter is supplied from said second CMTS.

30. (Canceled)

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1 31. (Original) The invention as defined in claim 27 wherein said at least one
2 parameter is supplied from said cable modem.

32. (Canceled)

33. (Canceled)

1 34. (Original) The invention as defined in claim 31 wherein said at least one
2 parameter is supplied over a channel different than the channel by which said cable
3 modem was communicating with said second CMTS.

35. (Canceled)

1
1 36. (Currently amended) ~~The invention as defined in claim 35~~
2 A method for use in a first cable modem terminating system (CMTS), the method
3 comprising the steps of:
4 receiving as an input at least one parameter for cable modem service provided
5 between a cable modem and a second CMTS which is initially serving said cable modem,
6 said at least one parameter being established during initialization of said cable modem
7 service between said cable modem and said second CMTS; and
8 establishing cable modem service between said first CMTS and said cable modem
9 using said at least one parameter;
10 wherein said at least one parameter is one from the group consisting of: a
11 configuration file, a security association, DOCSIS version, concatenation support,
12 payload header suppression, and multicasting support.

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1 37. (Currently amended) ~~The invention as defined in claim 35~~
2 A method for use in a first cable modem terminating system (CMTS), the method
3 comprising the steps of:
4 receiving as an input at least one parameter for cable modem service provided
5 between a cable modem and a second CMTS which is initially serving said cable modem,
6 said at least one parameter being established during initialization of said cable modem
7 service between said cable modem and said second CMTS; and
8 establishing cable modem service between said first CMTS and said cable modem
9 using said at least one parameter;
10 wherein said at least one parameter is supplied from said second CMTS.

11
1 38. (Currently amended) The invention as defined in claim 35 36 wherein said at
2 least one parameter is supplied after failure of said second CMTS.

3
1 39. (Currently amended) The invention as defined in claim 35 37 wherein said at
2 least one parameter is supplied prior to failure of said second CMTS.

3
1 40. (Currently amended) The invention as defined in claim 35 36 wherein said at
2 least one parameter is supplied over a channel different than the channel by which said
3 cable modem was communicating with said second CMTS.

41. (Canceled)

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1 42. (Currently amended) The invention as defined in claim 41 further comprising
2 A first cable modem terminating system (CMTS), comprising:
3 a memory for storing at least one parameter received by said cable modem as an
4 input for cable modem service provided between a cable modem and a second CMTS
5 which is initially serving said cable modem, said at least one parameter being established
6 during initialization of said cable modem service between said cable modem and said
7 second CMTS; and
8 a processor for operating said first CMTS to establish cable modem service
9 between said first CMTS and said cable modem using said at least one parameter;
10 an input port to receive said at least one parameter which is supplied via said
11 second CMTS.

12
1 43. (Currently amended) The invention as defined in claim 41 further comprising
2 a receiver which receives said at least one parameter which is supplied from said cable
3 modem.

44. (Canceled)

1

45. (Canceled)